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[Our thanks are due to Judge Williams for the following Extract. Much good may be done by bringing the subject of Lyceums before the respective Counties, and there seems to be no way so effectual as to offer it to the consideration of the Grand Jury. It is with men who have influence in society, from station, talent and integrity, that all improvements arise; when such lead, the others follow.

'Hos tota armenta sequuntur.']

Art. I. — Judge Williams' Address.

Extract from a Charge delivered to the Grand Jury, at a late term of the Court of Common Pleas, by Judge Williams.

To train up our children and youth in the way they should go is a matter of incalculable importance. It is of incalculable importance to their own happiness and respectability in life; it is of incalculable importance to the welfare of society at large; it is of incalculable importance to the permanency of our republican government. The people of this nation are engaged in a momentous and perilous experiment on the stability and advantages of republican institutions. The only security of these institutions is a general diffusion of knowledge and virtue among the people. To this end free schools are required by law in

all our towns, and I trust they do, and will receive, that patronage and attention which their importance demands, and which are essential to their success. But, permit me to ask, is not something more required than that limited system of education which has heretofore prevailed among us? Are not erroneous and inadequate notions of the nature and extent of the process of education too extensively, if not generally, entertained? If I correctly understand the common impression on this subject, it is, that education is merely a sort of mechanical process; that it consists altogether in passing through the various exercises of the schools; that it *commences* when the child *enters*, and *ceases* when it *leaves* the school. Hence inquiries are made, at what age education should commence? Hence, too, we hear it said of a young man who has left the school, who has been graduated at a university, or entered upon the practice of a profession, that he has finished his education. Such phraseology clearly indicates to my mind that this matter is very imperfectly understood.

What is education? What are its nature, extent, and objects? I answer, education, in its broad and genuine meaning, has been defined, and should be understood to be, 'the progressive and harmonious development of all the intellectual and moral powers of our nature; the complete subjection of ourselves to the control of right principles, and the acquisition of all the knowledge that may be useful to enable us to fill well the sphere of duty in which our Creator has placed, or to which he may call us.' Education is therefore the great object and purpose of our present state of existence. In all its stages, it has reference to the future, and ought to be in continual progress until, in the providence of God, we are deprived of our powers of advancement. As we pass along through life, our relations to the beings around us are multiplied and enlarged. These new relations are attended by new obligations and responsibilities, and of course increased claims, of one kind and another, are daily made upon our minds and hearts. To understand and discharge these new obligations, responsibilities and claims, it is necessary for us to make constant and higher acquisitions of knowledge, and to reexamine the correctness of our principles in their operation upon new classes of duty. By these means the process of education goes on, or rather should go on progressively towards perfection.

In education, the mind is not a passive recipient of knowledge. Knowledge does not consist in receiving and assenting

to a proposition because it is found in the text-book or announced by the teacher. The mind — *the mind* must, for itself, be the active agent in the investigation of truth. It must examine, compare, discriminate, reflect, determine and judge, for itself. He alone can properly be said to know the truth, who has himself examined its foundations, and investigated its principles. All other knowledge is, I will not say worthless, but *imperfect*. Education, therefore, is not the exclusive employment of children and youth. It is not the peculiar privilege of one age, or one sex, or of any one class or portion of the community. It is not confined to the school-room, to academic groves, or to the halls of universities. It is not limited to any one time or place. It may be pursued, and successfully pursued, by all persons, of all ages, of both sexes, at all times and in all places. The process should commence with the first gleam of infant intellect, and continue so long as we have minds and hearts susceptible of improvement. Our present life is a continued school of education and discipline preparatory to a future state of being.

If these views of the nature and extent of the process of education are correct, we may readily perceive the deficiences of our existing institutions. We have now, indeed, infant schools, early primary schools, Sunday schools, district schools, high schools, academies, universities, law schools, medical schools, and theological schools. All these, it is admitted, though susceptible of great improvement, are, on the whole, in successful operation around us and among us, and they are of immense value; but they are not adequate to the exigencies of the community. The higher classes of these institutions are designed principally for professional, and not for popular education; and the others are exclusively for children and early youth. Something more is therefore required for popular, adult education. Some institutions are wanting to take up popular education where the free schools leave it, and to conduct it through the more advanced stages. The mechanical operations of reading and writing, the fundamental rules of arithmetic, and a slight knowledge of grammar and geography, comprise, it is believed, the substance of all that is generally taught in our free schools. The great body of the pupils are then called away to the active and laborious employments of life. By the language and conduct of those around them, they are taught to believe, and they do believe, that their education is then completed; that in the way of study and mental effort, nothing for them remains to be

done; that to them all the avenues to further progress in literature and science are closed and barred forever. I know there have been and are exceptions. Some of the brightest luminaries and benefactors of our race have sprung, by the elastic power of their own minds, from what are called the humbler walks of life. By their own unassisted energies, they burst the thraldom of their condition, and ascended to an eminence where they commanded the homage of their cotemporaries, and the gratitude of succeeding ages. These exceptions, however, are not sufficiently numerous to affect the general truth of the former remark. They are sufficiently numerous to prove, if proof were required, that intellect and genius are not the result of condition; but they are, at the same time, so rare, that they are gazed at with astonishment rather than as examples for imitation. A very large proportion of mankind, on leaving the school, cease to learn. They know, indeed, by report, that there are sciences, such as natural philosophy, chemistry, mathematics, and others, of the nature and principles of which they are ignorant. They believe, also, as matter of faith, that a knowledge of these sciences may be acquired by those who have wealth, and opportunity, and patience, and application. But, as they possess not the means, they turn their attention to objects which they believe to be attainable. They therefore either devote all their energies to the acquisition of wealth, or sit down in repining despondency or contented ignorance, or perform their daily tasks of allotted toil with listless apathy. Many of them soon seem to have forgotten the little they had learned, and to have become almost unconscious of the possession of mental faculties. Now, who can calculate — who can conjecture the amount of intellectual power which is thus crushed, and buried and lost, under the weight of these feelings of despondency, and contentment and apathy?

Here, then, we may perceive the want and the necessity of some new institutions, or some new system of measures, to interpose and rescue this neglected portion of the human mind from its degradation; of some institutions to take up popular education where the common schools leave it, and to conduct it through the higher stages; of some institutions in which the acquisitions made in the free schools shall be considered, not as the completion, but as the rudiments — the mere alphabet of education. It is to the formation of institutions of this kind, calculated to promote and diffuse the blessings of useful know-

ledge universally, that public attention has recently been directed, and with encouraging success. In many places in this Commonwealth, the people have begun to realize the all-important truth, that the education of the school-room is not so much intended to conduct the pupil to a certain state and leave him there, as to kindle an ardor and give an impulse, which shall bear him onward to farther and higher degrees of advancement. They are accordingly combining their efforts and concentrating their powers for the promotion of self-cultivation, mutual instruction, and general improvement in useful knowledge. For these purposes, voluntary associations, under the name of Lyceums, are formed in many of our towns and villages, and they are admirably adapted to the circumstances and wants of our population. These associations hold stated meetings for reading, conversation, discussions, lectures, for illustrating the sciences, or such other exercises as they judge most useful. As it is found convenient they collect a cabinet consisting of books, apparatus for illustrating the sciences, minerals, or other natural or artificial productions. They conduct their exercises in different ways to suit the wants, tastes and acquirements, of their respective members. They may be formed in every neighborhood, and adapted to every conceivable variety of circumstances in our country. Let, for example, twenty farmers, or twenty mechanics, or twenty day-laborers, or some of each class, combine, and appropriate only six cents a week each from their earnings, to this object. They may very soon thus obtain a valuable collection of books, which they may read in those leisure hours which are now too often wasted in idleness, or dissipated in animal indulgences. Let them now meet, at stated times, to converse upon the subjects discussed in their books, to impart to each other the knowledge, and to interchange the ideas suggested by them, and a Lyceum — upon a small scale, indeed, but adapted to their circumstances, and of vast utility to the members — is established. It would gradually mingle thought and reflection with all their pursuits and employments. 'Their daily labors would involve a constant exercise of intellect, and they would become, on all subjects, more intelligent men. They would acquire a habit of looking into the reason of things, and this habit would extend to everything.'

The grand object of these institutions is, the promotion of general intellectual and moral improvement. It is to make men more intelligent, more rational; to elevate the human character,

and to make more broad and striking the distinction between the rational and the merely animal creation. It is to operate upon, and to bring into operation, and to present in stronger relief, that property of our nature which distinguishes it from that of the inferior orders of creation, the capacity, namely, of progressive and indefinite improvement. It is to make men less the creatures of *sense*, and more the beings of mind; to elevate them above the groveling desires, and carnal appetites, and sensual indulgences, which corrupt the heart and degrade the character, and make them more enlightened, more virtuous, and more happy.

The first step towards this desired reformation and improvement is to awaken an ardent spirit of inquiry. This lies at the foundation of all intellectual advancement. You cannot force wisdom on the unwilling or the indifferent mind. The thirst for knowledge must be excited before the refreshing draught will be sought or relished. Lyceums will tend to awaken this spirit by presenting objects of laudable curiosity to the mind, and, at the same time, offering means, and opportunities and facilities, for gratifying it. It will soon be discovered that the sciences, in their grand outlines and results, in their more important details, and especially in their practical applications to the arts and business of life, are far more simple and intelligible than had been supposed. It will be discovered that the technical terms and learned phraseology in which the sciences have generally been presented, are not the *essentials*, but the *accidents*, and *drapery*, and *pedantry*, of learning. People will, by degrees, become interested in the pursuit and acquisition of those intellectual treasures which had before been considered the exclusive property of the learned. This interest will be increased by association, by mutual intercourse and instruction, by seeing all around them engaged in the same pursuit, animated by the same spirit, and cheered by the same inspiring hopes.

Time will not permit me, on this occasion, to dwell on the various characteristic features of these associations. They are recommended by their simplicity, by their economy, by the soundness of their principles of education, by their social bearings, by their practical tendencies, by their moral influences, by their accordance with our republican institutions, and by their tendency to excite and direct to worthy objects a noble spirit of inquiry. They appear to be adapted to all circumstances, to all times, and to all states of society among us. They recognise

no place and no community where intellect exists, in which it is not the duty and the privilege of its possessors to adopt measures by which intellect may be improved. To the parent as well as to the child, to the master as well as to the apprentice, to the man of gray hairs as well as to the sprightly youth, to him who eats his bread in the sweat of his face as well as to him who fares sumptuously every day, they offer sources, facilities, motives, inducements, for social, intellectual, and moral exercises and enjoyments, which it is the exalted privilege of rational beings alone to possess. If generally established and faithfully conducted, they will shed abroad the dignity of science, while they carry the success of business into every farm-house and work-shop. They will convert the family, the social circle, and even the tea-table and fireside, into schools of mutual improvement, and scenes of the purest and highest enjoyment.

These institutions are not required by law, but are established by the spontaneous movements of the citizens. They are not properly within our official cognizance, but, as they appear to me to be intimately connected with our systems of primary instruction, and calculated to impart to our free schools increased importance and efficiency, and to give to society a new impulse and a brighter aspect, I have deemed it not inconsistent with the duties of the present occasion to recommend them to general consideration.

Art. II. — Scientific Tracts.

Scientific Tracts, designed for Instruction and Entertainment, adapted to Schools, Lyceums, and Families, conducted by **Josiah Holbrook, and others.**

There has always been in science too much mystery. This arose partly from necessity and somewhat from craft. The vocabularies alone have been enough to discourage an aspirant for knowledge; and many may think the citadel impregnable, where the outposts are so formidable. But, as learning no longer dwells in monasteries, let science be shrouded no longer in mystery.

It has been also too generally believed, that a science, to be useful, must be thoroughly understood; but this is an error. Professors, indeed, should know all that may be known; but

the more numerous class may obtain much that will apply to their condition in life, and much to reflect upon and compare, if they have but an outline of any of the sciences, that is not, and never may be filled up. To this end, the advantage cannot be computed that the public would receive from a general circulation of judicious scientific tracts. Short they should be, or they will require too much attention; the illustrations should be familiar, and the experiments such as may be within the reach of all who read. The unlearned should know that there is much philosophy in familiar things. An apple is said to have given an impulse to Newton's pursuits, and a kite and a stove are associated in our minds with the discoveries and inventions of Franklin. In short, the tracts should be of a plain, practical character, for he who first connected science with mystery and jargon, united those that nature intended should be separate.

Mr Josiah Holbrook, one of the compilers of a series of scientific tracts, has a mind of a peculiar and practical tendency, directed to the simplification of instruction; and in this all his plans have had eminent utility and success. He is to be aided by other gentlemen distinguished for acquirements. The tracts are to be constructed on a plan of such simplicity as will ensure their utility in schools and families. The English tracts have been too complicated, and have not brevity or simplicity enough for the family circle. The first Number of the series under consideration is on the atmosphere; and we make the following extracts to show the familiar manner in which it is presented.

'Few subjects are more important, or less understood, than the atmosphere we breathe. As it surrounds the earth and presses with great weight upon its surface, it comes in contact with everything, and bears a most interesting relation to every animal that walks upon the earth, swims in the sea, flies in the air, or creeps in the dust — to every plant that is pleasant to the sight, or good for food — and to every mineral that glitters in its bed, adorns a cabinet, or is used in the arts.

'It moves our lungs, circulates in our veins, warms us in our fires, enlivens the midnight lamp and makes it an agreeable substitute for the light of day, fans us in the breeze, terrifies us in the tornado, conducts sound, now in the soft whisper, the voice of intelligent conversation, the flashes of the orator, or enchanting music; now in the roar of the cannon, the groans of the dying, or terrific thunder; it wafts the ship, heaves the placid ocean into billows, takes the heat of the equator and carries it to

the poles, and exchanges it for a cooling breeze, which it kindly returns to temper the scorching rays of the torrid sun; or, using the language of an elegant French writer, "In the use of the atmosphere, man is the only being who gives it all the modulations of which it is susceptible. With his voice alone, he imitates the hissing, the cries, and the melody of all animals, while he enjoys the gift of speech denied to every other. To air he also sometimes communicates sensibility; he makes it sigh in the pipe, lament in the flute, threaten in the trumpet, and animates to the tone of his passions, even the solid brass, the box tree, and the reed. In a word, he harnesses it to his car, and obliges it to waft him over the stormy billows of the ocean."'

'All the properties and operations of the atmosphere may be classed in two divisions, viz. chemical and mechanical. Weight and elasticity are the properties by which nearly all the mechanical operations are conducted; and although these operations are literally innumerable and highly interesting, they must give place on the present occasion, to its not less numerous or interesting uses and phenomena conducted by chemical agencies.

'Among the infinite, and infinitely varied chemical operations constantly carried on in the processes of nature and the arts, scarcely one can be found, with which the atmosphere has not some connexion and some agency. It must be understood, however, that in much the greatest number of cases in which the atmosphere acts as a chemical agent, but one portion of it takes any considerable part. And although this portion constitutes but about one fifth of the whole, it fills a greater variety of offices, is more active and more efficient in giving power to other agents, in moving and calming the elements, in preserving order and promoting health and happiness, than almost any other ingredient hitherto discovered in the material universe.

'The name of this most efficient and useful part of the atmosphere, this almost universal agent in nature and the arts, this mover and regulator of other agents, and friends of man, is Oxigen.'

'To explain fully all the operations carried on by the agency of oxigen, would require volumes instead of a small tract. A few of the most important can therefore be mentioned, which are the following:—

'I. Oxigen *supports life* by aiding the lungs in the process of respiration.

'The lungs inhale air twentysix or twentyseven times in a minute, taking in at each inspiration about forty cubic inches, which is something over one hundred hogsheads a day. A

chemical action is constantly carried on by the atmosphere and lungs, which the Creator of both has so wisely and wonderfully fitted to each other. By this action, nine or ten gallons of oxigen are consumed in an hour, or taken up by the blood to form another kind, of an entirely different character, to be mentioned and explained in another place.'

'If any animal be confined in a vessel or tight room, from which the atmosphere is entirely excluded, he may live until the oxigen is so far consumed as to be unfit for respiration, when he will die. Many persons have lost their lives from the want of a supply of this vital air. The most remarkable instance, of such a disaster on record, occurred at Calcutta in a prison called the "black hole." One hundred and fortysix English prisoners were forced into a room eighteen feet square, from which fresh air was almost wholly excluded. Very soon after they entered, a profuse perspiration commenced, followed by a high fever and raging delirium, with cries, "air, air, water, water," with insults to their merciless captors, that they might be provoked to put them out of their wretched existence.

'They entered this prison of death at eight o'clock in the evening, and at six in the morning but twentythree of the whole number retained the principle of life.

'Although oxigen is essential to the support of life, in a pure state it will soon destroy it, by the sudden and powerful excitement it produces in the system. A few inhalations of pure oxigen will increase the pulse from seventy or eighty, to one hundred and twenty, or one hundred and thirty, beats a minute.

'Inhaling air with a very littte more than the common proportion of oxigen, produces a sudden and remarkable effect on the system. The substance known by the name of exhilarating gas, which has a similar effect upon the feelings with ardent spirits, or more like the vapor of spirits, or of ether, differs from the common atmosphere, only in containing thirtyseven per cent of oxigen, instead of twentyone per cent.

'Aqua-fortis, or nitric acid, is composed of the same ingredients with the atmosphere, and owes its great power in corroding almost everything it touches, to the seventyfive per cent of oxigen it contains.'

'II. Oxigen *supports combustion.* Every child knows that fire will not burn without air. But some kinds of air will instantly extinguish it. Wherever we see combustion going on, whether in a candle, a common fire, or in the burning of a city, we may know that oxigen is present, and is the principal agent in producing the light, the heat, or the terror. If a burning body be

confined in a small portion of atmosphere, it will continue to burn until the oxigen is consumed, when it will go out. Any one may prove this by a simple and useful experiment. Place the small portion of a candle upon a piece of cork or other light body, and let them float upon water in a basin. While the candle is burning, invert a pint or quart glass, so as to enclose it, and entirely exclude the atmosphere. The flame will continue until the oxigen is consumed, when it will be extinguished, and the water rise so as to occupy about one fifth part of the glass, or the portion which was before occupied by oxigen. This experiment illustrates two principles, first, that oxigen is essential to the existence of combustion; and second, that it constitutes about one fifth of the atmosphere.

'It is to supply the fire with a greater quantity of oxigen, that the bellows is used. It is to exclude oxigen from burning coals, that they are covered with ashes, to preserve them alive when left. While enough air is admitted to continue the coals in a state of ignition, the quantity is not sufficient to carry on the combustion with any rapidity; consequently the fire is not extinguished, nor the coals consumed.

'If pure oxigen be thrown upon a burning body, it instantly increases the power of the combustion. If a candle just extinguished, be immersed in a vessel containing this gas unmixed with any other substance, it will be instantly relighted. Many substances will burn in this air in a pure state which will not in common air. If iron be heated and immersed in pure oxigen, it will instantly melt and burn, throwing its particles in every direction, with an intense and brilliant light. Consequently, if the oxigen of the atmosphere were not diluted or weakened by another kind of air, stoves, andirons, and numerous other instruments made of iron, would melt and be consumed the instant they were raised to a high heat. Almost everything would be combustible, and the earth would soon present one great and general conflagration. How wise and how good then is the Creator of the atmosphere, not only in furnishing it with oxigen to support life and combustion, but in diluting it with another substance, to prevent its destroying every living being upon the earth, and the earth itself.

'III. Oxigen *carries on fermentation.* Without it, neither cider, beer, wine, or even yeast, or light bread, could be formed. Almost all animal and vegetable substances are liable to ferment, and consequently, to waste with decay.

'Wherever we witness this process, we may know that the same agent is present and employed, as conducts respiration and combustion.'

'IV. Oxigen *acts upon all the metals.* By this action the rust of

iron, the dross of lead, the corrosion of copper, brass, and silver, and the most beautiful paints, such as red and white lead, chrome yellow, and blue vitriol, is produced.

'Some of the metals combine with oxigen rapidly, others gradually, or even with difficulty. Iron for example, is very liable to rust, or oxidate, as chemists say; while gold utterly refuses to combine with oxigen, as it does with most other substances, except by an indirect process. If lead be kept in a melted state for a short time, it absorbs so much oxigen as to be changed wholly into dross, which is an oxide lead. But gold may be kept in a state of fusion and motion for months, or years, and never admit a particle of oxigen into its connexion; so proud a substance as gold, may however, by an indirect process, be led to combine with oxigen, and after that with many other substances. When oxigen once gets in possession of this metal, it readily transfers it to the surfaces of numerous substances, and extends it over a greater space than can be done by beating or any other process. By the aid of this agent, then, numerous utensils, and even cloth, cords, and thread are gilded at a most trifling expense.'

'Ink of a good quality, is sometimes pale, when first applied to paper, but after a few days, it becomes of a deep and permanent black. Indigo, when first formed from the plant, is green, as it is when first applied to cloth; but by a short exposure to the air, or to oxigen, it becomes the beautiful and permanent blue so extensively witnessed in woollen, silk, and cotton goods. Oxigen is not only the most active and general agent in preparing colors and fixing them to their fabrics, but it is more generally and successfully employed than any other, for destroying them. The important process of bleaching is conducted by it, whether by the old method of exposing cloth alternately to moisture and the sun, or by the modern and improved method of immersing it in chlorine.'

'*Carbonic Acid, or fixed air.* — This gas, which is nearly twice as heavy as common air, is found to exist at all times in every region of the atmosphere, from the lowest ravine or cave, to the top of the highest mountain. Except in caves, wells, and some other low places, where carbonic acid settles from its great weight, it is never found in the atmosphere except in small quantities, some say a hundredth part, some a thousandth, but probably variable, existing in larger quantities, at some times, and in some places than others.

'Although this substance is fortunately never found in the atmosphere except in small quantities, it frequently takes an important part in promoting the happiness, and producing the disasters of

mankind. It is supposed to be an important agent in the process of vegetation; vegetables having the power of extracting it from the air and converting it to their own sustenance and growth. While the whole animal kingdom are constantly inhaling or consuming oxigen, and at the same time throwing off carbonic acid, the vegetable kingdom are inhaling or absorbing carbonic acid, and a part of the time at least, are throwing off oxigen. So that these two great kingdoms of nature are mutually and constantly performing these kind offices to promote the growth and prosperity of each, while they prevent the destruction of both, and of every living existence which animates, enriches, and dignifies this lower creation. For carbonic acid is not only essential to the growth of vegetables, but is certainly and instantly fatal to animals, one full inhalation of which produces death, unless a supply of oxigen is instantly provided. The moment a person enters an atmosphere of this gas, as has frequently occurred in wells, and the fermenting vats of breweries and distilleries, he drops lifeless, and past recovering, except the supply of vital air is immediate.

'Carbonic acid is no less fatal to combustion than to animal life. If a burning candle or coal be immersed in it, every appearance of combustion is instantly destroyed; but it may be again relighted, by letting it into a vessel filled with pure oxigen.

'The sparkling appearance, and agreeable taste of the best cider, beer, wine, and soda water, are produced by this active substance. By the loss of it, they become dead as we say, and are not only unpleasant to the taste, but injurious to health. So that the same substance which is distressing and fatal if taken into the lungs, gratifies the taste and promotes health when received by the stomach.'

'Besides the air last mentioned as existing in the atmosphere at all times and in all places, several others are occasionally found, and in some places they are constantly forming in great abundance, among which is one resembling the gas used for lighting cities.

'This gas is produced in large quantities in marshes, masses of stagnant water, and in large cities, where a due regard to cleanliness is not observed; and is the cause of sickness, and perhaps of malignant fevers. By moving the earth in the bed of any pond, and even in most streams of water, bubbles will be disengaged, and rise to the surface, where they may be collected in bottles, and by applying a lighted candle, they will be found to be combustible.

'It is much lighter than common air, and consequently rises

into the higher regions of the atmosphere, where it is frequently exploded by electricity, and is perhaps the cause of shooting stars sometimes observed in the heavens.'

'Air of every kind appears to be capable of expansion and compression to an indefinite degree. This property belongs to each gas separate and to several combined.

'In the manufactory of soda water, one hundred and thirty gallons of carbonic acid is forced, by the means of a condensing pump, into a cask, of the contents of ten gallons, six of which are occupied by water. In the fine syringe, the atmosphere is suddenly compressed into so small a space, as to cause the oxigen it contains to ignite a piece of cotton, previously prepared by moistening it with water highly charged with saltpetre, and then thoroughly dried. When ninetynine hundredths of the air contained in a receiver, is removed by an air pump, the remaining one hundredth is immediately expanded so as to occupy the space which was before occupied by the whole. If a common Florence flask, while containing nothing but air, be heated to a high degree, and then the mouth immersed in water while it is suffered to cool, the water will rise to occupy almost the whole contents of the flask.'

'This peculiar and highly interesting property of all gases, gives to the atmosphere some of its most important powers and uses. It is evidently essential to the existence of winds, and to every motion of the air, unless it may be in a slight degree. It is from this property, that the atmosphere so readily gives place to all other substances passing through it. Were it not for this, we should be met with a powerful resistance, whenever we attempted to move from place to place. This is the origin of the trade winds occupying about sixty degrees of the equatorial regions of the earth, blowing constantly from east to west, of the monsoons blowing six months of the year in one direction, and the other six months directly opposite, of the deadly samoon, of land and sea breezes, of the most variable and shortest currents of air, of the gentle breeze, the brisk gale, the raging tempest, the sweeping hurricane, the water spout, and the tornado. It is by the great expansion and compression of air, that ships are constantly moving from continent to continent, that the noxious vapors of cities are removed to give place to an atmosphere more fresh and pure, and that it constantly preserves, amidst all the contaminating influences to which it is exposed, its salubrious and vital energies.'

Art. III.—The Fellenberg Institution at Hofwyl.

[In no situation does man appear so much like a superior being—a beneficent angel, as when it is his ruling passion and his employment to devise and execute the means of making his kind more moral, intelligent, and happy. When such a man dies, his usefulness and his genius survive in the institutions he has founded; and, though he is no more seen among men, his name is often heard in the invocations of gratitude.—Such is Fellenberg—a rare example of one, who, with small means and under great discouragements, has accomplished so much. With no larger means (£500 a year) than those of the good 'Man of Ross,' he has founded a system and perfected it, that, if it may not regenerate Europe, will yet produce abundant local and general good.

We select from the Christian Spectator, an account of Hofwyl, by a gentleman who has resided there a year, to study the plan of Fellenberg.

The government of the school is truly paternal, and the pupils evince that 'alacrity and cheer of mind' that mark a youth at home. Nothing is learnt by rote, and to some classes the lessons are given in the fields, and in the intervals of labor. There is little *hasty* progress in the pupils, but all is the effect of steady and gradual development. There are two classes of pupils, the rich and the poor—the rich are often princes and sons of ministers of State, and the poor, sometimes vagrants from the highway. The moral qualities are watched with great discrimination, and there is no better school than Fellenberg's for kindness, sincerity, and self-control.]

Hofwyl, 1829.

My dear friend—I cannot better introduce you to this celebrated place of education, than by some account of the motives and views which actuated its founder.

Destined by his patrician birth to take part in the government of his native Canton, towards the end of the last century, Fellenberg's attention was early excited by the misery and vice which he observed around him; and he resolved to devote himself to the moral and intellectual reformation of his country.

The laboring classes he saw in a state of ignorance, which rendered them habitually indifferent to everything but their animal necessities and enjoyments; yet capable of being excited and misled—equally fitted to become the instruments of licentious anarchy, or the slaves of despotism. He traced the origin of this state of things to the absence of all rational means of intellectual education, the exclusive attention paid to reading and writing as mechanical acquisitions,—to the universally indif-

ferent or technical manner in which moral and religious instruction was communicated, and the utter neglect of all efforts to cultivate moral habits, and to bring principles into action. It required but a glance at the higher schools and universities, to see how little was to be expected for the superior classes. A feeble body — a perverted understanding — a false and generally corrupted taste — much ambition with some qualifications for shining in the world, — these were the common results of the existing course of education; and rarely was it possible to discover any traces of a salutary or ennobling influence on the character and life. No hope could be entertained that the higher classes, who alone possessed the means and the ability, would make any effort to redeem those on whose ignorance they considered their supremacy as reposing. Both high and low, in the view of Fellenberg, seemed destined to sink together. At a later period, the illusive promises of philosophy were proclaimed and broken; and its influence in Switzerland went to inundate it with a flood of new errors and vices.

Fellenberg was convinced that every improvement must commence with the germ of society; that it was only in acting on the rising generation by improving the means of education that any hope could be cherished of improving its condition. He believed that the efforts made for this purpose must be directed, at the same time, towards the two extremities of the social body; and that it would be in vain to reform those who are destined to labor and obey, without improving the character of those who consume and govern. He believed that no attempt should be made to disturb the order of the community, by confounding classes of men whose lot a wise Providence had so widely separated; and for whose separate existence the various physical and intellectual qualities which He has bestowed, and the necessities of physical and social life, seem to form a permanent basis.

While he would anxiously endeavor to elevate those whose talents rendered them capable of it, to stations in which society could enjoy the utmost benefit from their efforts, he believed that with the mass of the laboring classes, the only rational course was to prepare them for the situation in which Providence had placed them, and to render them happy in it by raising them to their proper rank as *rational* and *moral* beings.

It was also of the first importance to establish new relations between the different classes of society. The poor must be led by a rational and religious education, not only to be content

with their own station, but to receive the order which Providence has assigned; and to see how unworthy of the understanding, as well as the heart that envy and jealousy is, which the lower classes are so ready to indulge towards the more favored. The rich must be taught to estimate the worth of industry, to feel how dependent they are upon the laboring classes, and to observe and revere the dignity of moral character which is often found among them.

An object of not less importance in the view of Fellenberg, was to correct that unchristian idea of the great world, that to provide for the present and eternal welfare of immortal beings by education, is an occupation beneath the dignity of the more favored classes. It was necessary, therefore, first to create an interest in the object, by showing how much good may be effected, how much happiness produced, and how much real enjoyment secured to him who becomes the instrument of such improvement. Practical demonstration was to be given of the importance of this to the higher classes, in providing them with more skilful overseers, and more honest and obedient servants; and in giving to the State more dutiful and useful subjects.

To attain these ends, no means were more likely to be successful in the view of Fellenberg, than to establish an institution for both classes, in which they should be so separated as to prevent all confusion, and yet so connected that each might observe the other, and that occasion might be given to establish on a christian basis, the character of each, as well as those relations which must afterwards exist in society. 'To this object,' he observed ten years since, 'I have devoted my life and all that I possess, for twenty years; — to this I still devote them, and am resolved to devote them to my last breath.'

He believed that agriculture, which in the order of Providence was the primitive, and must ever be the principal occupation of mankind in the social state, is best adapted to develope physical and intellectual powers in their proper harmony. He was persuaded that an agricultural establishment and the employments necessarily connected with it, should form the basis of the contemplated institution. With these views he purchased Hofwyl, at the close of the last century — at that time a private country seat, but now forming a little village, containing three hundred inhabitants, exclusively on his property and under his control. It comprises a farm, including recent additions in the neighborhood, of about six hundred acres; workshops for the

fabrication and improvement of agricultural implements, and of clothing for the inhabitants; a lithographic establishment in which music and other things useful to the institution are printed; a Literary Institution for the education of the higher classes; a Practical Institution for those who are destined to trade, or whose circumstances do not permit a more complete education; and an Agricultural Institution for the education of the laboring classes.

Hofwyl is about six miles from Berne, the capital of the Canton of the same name, and the chief town of German Switzerland; and about a mile from the great road which traverses Switzerland from S. W. to N. E. The approach from Berne is through a wood, which presents no traces of cultivation. In issuing from it, you come almost immediately in view of the large buildings and luxuriant fields of the establishment. It is situated on a gentle elevation in the midst of an amphitheatre of hills. On the north, the view is bounded by the Jura Mountains, and on the south by the Bernese Alps, whose tops are covered with perpetual snow. It is surrounded by a valley about eighty feet in depth, which separates it entirely from the neighboring farms and villages. In this valley are two small lakes, and the surrounding scenery is still farther diversified by the villages and hamlets on the opposite hills. The isolation of Hofwyl, in the midst of villages and at no great distance from a large town, and the combination in its neighborhood, of some of the grandest with some of the most beautiful objects of Swiss scenery, were circumstances of no small weight in the view of Fellenberg, in reference to his great object.

On entering Hofwyl from Berne, the traveller finds himself in an extensive court or play ground, surrounded on three sides by the buildings devoted to the Literary Institution, and sheltered on the west by a little wood composed of a variety of trees, which serve at once as a place for botanical observations, and as a retreat during the heat of summer. In pleasant weather the lessons are not unfrequently given here, in arbors furnished with seats for this purpose.

The principal building on the east of this court is inhabited by eighty pupils, under the constant superintendence of Fellenberg, and four of his children. The basement story is occupied by the kitchen and store-rooms. The first floor is divided into four sections by halls, which traverse the building in its length and breadth. One of these sections is occupied by the super-

intendents, another by the dining hall and music room, a third and fourth by the chapel, and three large and lofty rooms for study. The second floor is devoted to the class rooms, the library, and the collection of casts. The third and attic stories contain the dormitories for the pupils, and chambers for the superintendents. The size, airiness and neatness of every part of the building are very striking; and a well arranged system of stoves on the Russian plan, maintains a mild and uniform temparature during the winter, which is not to be found in climates far less severe, where the methods of employing fuel are less perfect. In this institution Fellenberg proposes to give a complete education preparatory to professional studies. Between twenty and thirty instructers are employed in this establishment, most of whom reside in another building, and have no connexion with the pupils except during the hours of instruction. Two small buildings which shelter the court on the north and south, contain a large warm bath for winter, the store-room for the gardening tools of the pupils, a cabinet-maker's shop, in which those who have the disposition are taught this art, the book-bindery of the institution, and several rooms which are devoted to exercises in instrumental music, fencing and dancing, which would interfere with the tranquillity necessary in the principal building.

Beyond the Literary Institution is a second court, furnished like the first with frames and poles for gymnastic exercises.

On the east side of this court are garden spots, assigned to the pupils as a means of amusement and exercise; and at a little distance on the side of the hill, a circular cold bath of hewn stone ninety feet in diameter and ten feet deep, in which they are taught to swim—with a neat bathing house in the Gothic style.

On the west side of this court is the *Chateau* or family mansion, in which Mrs Fellenberg resides with her younger children. It also contains the *bureau* of the establishment, in which strangers are received, and the business of the institution transacted by a person devoted to this object. It likewise serves as a depot of the little articles which the pupils have need to purchase at a distance from a large town. In the garden of the *chateau* is the school for peasant girls, under the immediate direction of Mrs Fellenberg and one of her daughters.

In the rear of the *chateau* are two buildings occupied by twenty or thirty pupils of the Practical Institution. These are

lodged and fed in a more simple manner than the pupils in the Literary Institution; and are permitted to avail themselves of its lessons, and to partake of the labors of the farm or the *bureau*, according to their necessities and destination.

In the rear of these buildings is a second cold bath of hewn stone, only two feet in depth, designed for the use of the younger pupils. Adjoining this is a building 150 feet long, the lower part of which forms a large sheltered arena for riding and gymnastic exercises in unpleasant weather. The upper stories are occupied by the class rooms, and dormitories of the Agricultural Institution; in which children of the laboring classes are taught the practical part of agriculture, and receive three or four hours of instruction daily in reading, writing, arithmetic, and other useful branches. One of the chambers in this building contains a small collection of minerals, and of wild and cultivated plants from the neighborhood, together with two models in clay, made by the pupils themselves, representing in relief the surface of Switzerland.

A number of the pupils of this school are prepared by theoretical instruction and practical essays in the inferior classes, under the direction of the superintendent, to become teachers. No regular course of agricultural instruction is given; but several of those who frequent the institution as boarders, in order to make themselves acquainted with the system of agriculture adopted at Hofwyl, attend a course of lectures, which are given by Fellenberg himself to the older pupils of all the institutions.

On the north of the buildings which we have described, is an extensive irregular range, containing the farm house in which the pupils of the agricultural school take their meals, the various workshops, the laundry, dairy, barns, and stables. The stables contain fifty cows, and a number of oxen, which excite the admiration of strangers by their size, and the neatness with which they are kept.

At a little distance from the principal group of buildings, on the eastern descent of the hill, is the house occupied by the professors, in which the parents of the pupils are also lodged during their visits to their children. It contains a reading room in which some of the principal political and literary journals are received for the use of the professors. In this building is the chemical laboratory, and a collection of the most necessary philosophical instruments.

An interesting branch of the Institution of Hofwyl, is the

colony of Meykirk at the distance of five or six miles. It consists of eight or ten poor boys, who were placed under the direction of a teacher on a spot of uncultivated ground, from which they were expected to obtain the means of subsistence. It is designed as an experiment on the practicability of providing for the support and education of friendless children, without any farther expense than that of the soil which they cultivate. It resembles in effect, an establishment in one of our new settlements, except that several hours are devoted daily to intellectual and religious instruction, and thus the children advance in cultivation and knowledge as well as in hardihood and industry.

You will perhaps think these local details too minute, yet I believe you will perceive in them the key to many of the principles adopted by Fellenberg, and will be better prepared to understand the mode in which they are applied. In a visit of a few hours, such as is usually paid by the stranger, he can learn little more concerning Hofwyl. Should he pass the day he will be struck with the unceasing activity, combined with the greatest regularity, which reigns in every part of the establishment; and with the good order and harmony prevalent among the pupils, in the midst of the greatest freedom and gaiety. He cannot but admire the benevolence and perseverance which have led a single man, on the basis of his own private fortune, and in the face of the prejudices of those of his own rank, to create a set of institutions which furnish ample means for the thorough education of the higher classes, and at the same time provide for the gratuitous support and education of one hundred and thirty children. It is only after a long continued residence, that he will be able to appreciate that unwearied devotedness of a large family, by which all this is accomplished, — a devotedness which not only excludes them from the pleasures and amusements usually enjoyed by rank and fortune, — but also obliges them to live for others, and to sacrifice in a great measure those social and domestic enjoyments, which are of far greater value.

I am, etc. ———

Art. IV. — The Economy of Literary and Religious Institutions.

No principle in political economy is better established than that a liberal support of religious and literary institutions, is favorable to the pecuniary as well as moral prosperity of a people. This is apparent, in all ages of the world, in every country, and in all states of society; from the lowest class of Russians or Irish, to the most enlightened and refined circles in Europe or America. But we need not go so far to establish this important principle, in a system of means to produce the greatest amount of human happiness. It is evident in the present time, and in New England, it will recur to the recollection of the most careless traveller who has been in the different sections of our country, that the general prosperity in towns, villages, and counties, is nearly in proportion to the schools and religious institutions.

When the citizens of a town believe that they are *unable* to support clergymen and schoolmasters, they are always too poor, also, to repair roads, enclose their farms with fences, to repair the dilapidated buildings of their fathers, or even to replace the broken glass of a window, otherwise than by old hats and garments. But where public worship and common schools are well supported, it is common to see marks of general prosperity and individual wealth. There the public common will be neatly enclosed, and private possessions will indicate not only prosperity but taste.

These representations are not pictures, but facts, and establish the principle conclusively, that it is ever as a course of worldly policy and thrift, better to support the two kinds of institutions than to neglect them. The complaint of parents, that they cannot afford their children a good education, is therefore unfounded, as it will cost much more to bring them up in ignorance; and, when parishioners, on the plea of poverty dismiss a good clergyman, it will in the same way fall as heavily upon their purses as their morals.

On this subject experience is the safest guide. We exist in a state of being, and in a country, where the support of our physical natures does not take so much of our time but that much is left to be devoted either to idleness or improvement.

We are, moreover, not only active, but social, and of course are generally employed in connexion with others.

The question then arises, how shall this surplus time be used, and our social principles gratified? It is better to gratify them in a course that will advance the mind, the moral and intellectual principles, than in a manner that will deprave both. The former course is cheap, the latter only expensive. The most useful branches of education are uniformly the most expensive; yet many parents feel it a hardship that they must pay three dollars a quarter for instruction in the elementary branches of a useful education, while they pay ten dollars for the same instruction in dancing, and make no complaint.

On this point we have some statistics of our own. We know a town, in size about the third rate in New England, where schoolmasters receive five dollars and a half a month, and the clergyman is dismissed because the people are too poor to support him. This generation of paupers, however, give an ample support to two dancing schools, each of which costs them, directly and incidentally, a thousand dollars. These thrifty people, are of course too poor to paint their houses, or replace a glass broken in the windows, or a hinge on the doors; yet they have the ability to take several sleigh rides in a winter, at the expense of two dollars each, and to call three times a day at the tavern, at the expense of six cents a time. It may be said that this is but *one* town, and an extreme case; but perhaps the reader may know many such towns, though it is hoped that he lives in a better.

How many towns in New England pay, collectively, one thousand dollars to support a tavern that would not give fifty, to found a Lyceum. Yet, where would he get the most instruction and rational amusement? Young men will pay five dollars at an assembly — a sum that would, for a year, pay more than their proportion to an institution, that would not only advance themselves in knowledge, but have an increasing bearing on the improvement of all the young in their community.

Has not the reader himself, honest man as he is, sometimes paid two dollars to ride on the sabbath, though he now feels too poor to give one to a Lyceum, for a course of intellectual pleasure and instruction.

This principle of ours is uniform and invariable. Economy never stands in the way of improvement, which is itself the best

and most lasting thrift. There is no saving can be made in vice and ignorance. It will save money, and character, and crime, and punishment, and remorse, to advance the moral and intellectual culture of our nature. This is the way to make us, indeed, lords of the lower creation, rising in intellectual dominion and perfection towards the Being who ordained it.

J.

Art. V. — Progress of Lyceums.

More has been done in the last six months to extend the Lyceum system, than in the three years succeeding the attempt to introduce it. When the plan was first given to the public in the eleventh Number of this Journal, it was proposed as a subject rather for consideration, than for direct experiment. When it was determined to make the experiment, the county of Worcester fixed upon as the place, and the present name assumed, the whole was considered as of doubtful success, though worth the trial. The readiness with which the intelligent part of that enlightened county adopted measures to promote success, and the actual success of the first attempt, settled the question of practicability.

Since then the points of consideration have been rather those of policy, or of the best means so to extend the institution, that every county, town, neighborhood and family, in the Union, could participate in its benefits. The advance towards such an organization has been rapid and auspicious, beyond a parallel. The system is already introduced to some extent into every State in the Union, and in many instances, districts or counties have been so organized as to carry the advantages into every family.

In two instances, it has received the patronage of States with a view to make it a Board of Education, and a measure to extend the usefulness of common schools. Both objects have, in many instances, been effected in a triumphant manner.

By associations of teachers as departments of Lyceums, many towns seem to have changed their character, and in them there is now no complaint of apathy in parents, or indifference in teachers and scholars. All are animated, and resort to the same fountains of knowledge. The interest imbibed at these

meetings is carried to the fireside, which it makes a school of efficient and pleasing instruction.

In many instances the exercises have had a controlling influence over public opinion. Domestic economy formed the subject of an exercise in a Lyceum, about six months ago, in which the unnecessary and oppressive expense of mourning apparel was considered, and voted unanimously to be dispensed with; and from that, numerous similar votes have been taken by societies in various parts of the country. Rail-roads have been discussed at many Lyceums, where their utility has universally been established. Such a discussion was the origin of a Lecture which has been published in several editions, and has had some bearing on the public mind upon the subject of internal improvements.

Town, county, and state maps, have been discussed and executed by Lyceums — and if every town and county in the Union is hereafter furnished with an individual map, they will be indebted for it to Lyceums. Several town histories have been written by members of Lyceums, and numerous others are in progress.

The lottery system is now a subject for discussion in these societies, and much good will arise from the proper exposition of that bane of industry, honesty, and good morals. A great end of the system of Lyceums is to enlighten the *people*, the sovereigns, with whom resides the moral as well as physical energies of the country.

County associations, or conventions of teachers, have been productive of much good, and promise to do more for schools than any measure ever adopted. They are generally held in connexion with Lyceums; and the members, after explaining their mutual views and practice, return to their schools, better qualified for their dignified and responsible profession.

Some town lyceums are formed in most of the counties of New England, and in one county of Maine, not less than nineteen are now established. In Vermont, measures are in forwardness to establish a branch of this eminently social institution in every town in the State. In New Hampshire there are many branches. In Connecticut but few have gone into operation, but some of the active members of these will endeavor to gain the attention of the State during the present session of the Legislature. In fact there can be little doubt that the Lyceums

are becoming national institutions, and that they will be universal in the Union.

There is, however, a question that should interest its friends, and the friends of humanity — that is, how the present favor to the subject shall be best sustained, and how the organization shall be so complete as to render the operations most useful? As Lyceums offer a system of *self-education* and *mutual instruction*, let every friend to these unite with the nearest neighbor that can be induced to join, in some exercise to promote these objects. In this they will participate in each other's advancement, and their improvement will be social as well as intellectual; and, if mutual, it will perhaps be the more individual.

Art. VI. — African Education Society.

This society was formed at Washington, December, 1829, and the design of it is to prepare, by a suitable education, in letters, agriculture, and the mechanic arts, young persons of color, for future usefulness in Africa. The President is Rt. Rev. William Meade, of Virginia, and there are eighteen Vice Presidents, among whom are Gen. Walter Jones, Judge M'Lean, Doctor Nott, Mr Frelinghuysen, &c. The objects of this society engaged much of the attention of the late Gen. Harper, and he made some partial endeavors to carry his views into effect. The design of the society is to procure a suitable number of very young pupils, who will be instructed in the common branches of a school education. They will be brought up in habits of industry and order, and care will be taken to inspire them with generous and virtuous sentiments. Their manner of life will be so secluded, that they will not be subjected to the withering and degrading comparisons that are too commonly established between them and the whites. In fine, their whole education will be moulded on a plan the best fitting them to become the renovators of Africa.

There are already two other institutions, with objects somewhat similar; one at Newark and the other at Hartford. Neither have been eminently successful. The school in Connecticut is too much devoted to the higher stages of education, and few are found so much advanced as to satisfy the terms of ad-

mission. The school in New Jersey has not received a sufficient support, and has not always been able to find suitable subjects. The right plan seems to be, to receive the pupils almost in infancy. It is known that, when the London Missionary Society sent to this country for educated Africans to go as teachers to Sierra Leone, not one could be obtained.

In 1798, Kosciusko made a bequest for the liberation and education of Africans. The amount is now about $25,000, and a suit is now pending in which this is claimed by the heirs. The event is doubtful. The will requires that the slaves be purchased and liberated — and the executor (B. B. Lear, Esq.) is willing, if the suit terminates favorably, to purchase the slaves *on condition* of freeing and educating them — taking none that are old enough to have any knowledge of their social degradation, or contamination from their kindred and associations.

Art. VII. — New York Common Schools.

The Secretary of State, in his report of January 16th, shows that there are in the State 8872 organized School Districts, and that 268 new ones were formed in the year ending January 1, 1829. The general average of instruction is about eight months; and during the last year, 480,041 scholars have been instructed in public schools, and in private, 22,159. There are 68 towns, each having more than 20 schools organized; and the general average of districts gives 10 to each town in the State. In this estimate the city of New York is not included. In the city there are 463 schools, (of all kinds,) containing 24,952 pupils. Yet the committee say that there are 20,000 children, between the age of 5 and 15, who are growing up in vice and ignorance, and attend *no* school whatever. Of the 24,952 scholars, 18,945 belong to private schools. There is a general school fund of more than $1,600,000, and local funds in many counties. There is also land held for the same purpose, of the value of $500,000.

The Secretary makes the general complaint of the scarcity of competent teachers, and of those 'apt to teach.' The best scholars are not always the best masters; nor are men of *genius* preferable, as teachers, to those who are gifted with a more homely kind of sense.

Art. VIII. — English Newspapers.

The following extracts are from two letters to the Chancellor of the Exchequer, and shew how vastly superior is the general circulation of our papers, over the English. It may be added, that in general our papers contain original essays of a higher character, and have a greater tendency towards practical utility, than those of Great Britain.

'"Colquhoun computes, that, in 1812, there were in Britain one hundred and twentythree thousand heads of families, with incomes exceeding £800 per annum. Their number may probably be now one hundred and forty thousand; and, in the United States, almost every person with such a revenue would have a daily paper. Now, from a parliamentary document, printed in 1821, we find, that the average circulation of the London daily journals was about two thousand two hundred; and assuming that it is the same still, it follows, that the impressions of all these papers put together amount to only thirtyfive thousand. Hence we have reason to conclude, that, were papers untaxed, the wealthiest class alone would take three or four times as many copies of the daily papers as now serve the whole population of the country! a reduction of the duties would have a proportional effect on the circulation.

'"The population of the British isles, at present, is very nearly double the population of the United States; the one being above twentythree millions, and the other about twelve millions; deducting the blacks, the American population will be about ten millions.

'"In the British isles there are at present, according to M. Moreau, three hundred and thirtyfour newspapers; of which nineteen or twenty are daily: viz. sixteen in London, and three or four in Ireland.

'"In the United States, in 1810, there were three hundred and sixtyfour newspapers: in 1823, according to a table in my possession, there were five hundred and ninetyeight; and in last spring Mr Cooper estimated the number at eight hundred: [*'Notions of the Americans,'* vol. ii. p. 133] of these, according to the statement of an American editor to me personally, and according to a paragraph which appeared some months ago in several American journals, there are fifty published daily. New York, in the month of March last, had twelve daily papers; Philadelphia, eight or nine; Baltimore, five; Boston, three or four, &c.

'"The whole number of papers printed annually in Britain and

Ireland, on an average of the last seven years, as I find from the amount of stamp duty, was twentyseven millions, eight hundred and twentyseven thousand. This gives an average circulation of about eleven hundred for each.

' "I might, perhaps, state the average circulation of the American journals fairly enough at the same amount; because the papers there, which print a greater number than the others, compose a much greater proportion of the entire mass. But, taking them at one thousand copies each, and classing them as I find done in an American paragraph, the result is as follows:—

	Copies printed annually.
550 Weekly Papers, - - -	28,000,000
200 Semi-Weekly, or Tri-Weekly, - -	20,800,000
50 Daily, - - - - -	15,600,000
	64,400,000

' "If this estimate is fairly made, it shows that there are nearly two and a half times as many papers printed in the United States as in Great Britain, for less than half the population (excluding the blacks.) Combining the two ratios, it results, that a million of persons in the United States purchase five times as many newspapers as a million of persons in the British isles!

' "But to draw the parallel justly, we must recollect the peculiar circumstances of the Americans. They live so widely scattered, that one thousand persons are spread over as large a surface as ten thousand in Britain: hence vast numbers are far from any post office, and must find it difficult to procure a paper, though ever so able to pay for it. Again, the class of persons who possess entire leisure and accumulated wealth, and to whom a newspaper is a moral necessity of life, is comparatively small in America. To balance this, indeed, the laboring classes have better wages there than here: but the truth is, that if a paper could be had for two pence a week, the worst paid laborer could afford to get it: we shall, therefore, have a juster idea of the state of the press in each country if we compare the towns of the one with those of the other.

' "There is not a town in Great Britain but London that does or can support a daily paper!—In the United States, every considerable town has one or more: Rochester, a town with six thousand inhabitants, Troy, with nearly the same number, (both in the state of New York,) have each their daily paper, while neither Manchester nor Glasgow has one! Think of the capital of Scotland wanting a paper of this description, while an American town, of the size of Dalkeith, has one! Think, too, of Leith,

with a population of more than twenty thousand persons, trying, in vain, some years ago, to establish a weekly paper!

'"Philadelphia and Liverpool have nearly the same amount of population, but the English town has probably six times as much trade as the American. — Now Liverpool has eight weekly papers, which put forth eight publications in all per week. Philadelphia has eight daily papers, and eight or ten others, which put forth about seventy publications per week!

'"Scotland, with two million one hundred thousand inhabitants, has thirtyeight papers, not one of which is published more than thrice a week. Pennsylvania, with one million two hundred thousand inhabitants, had one hundred and ten papers in 1823, of which fourteen or fifteen were published daily!

'"These facts speak for themselves: I think they fully warrant the conclusion, that in the most thickly settled parts of the United States, which alone afford proper materials for comparison, the number of newspapers in circulation amongst any given number of inhabitants, is eight or ten times as great as in Britain."'

Art. IX.—Education in Kentucky.

Report of the Committee of Education, made by order of the House of Representatives.

The Report will gain little in interest by an abstract, but our limits will not admit the whole, and it is too valuable to be entirely omitted. It must have attracted public attention in Kentucky, for a second edition of two thousand copies has been circulated.

The Legislature, impressed with the importance of a general system of common schools, requested from President Woods, and the Rev. Mr Peers, their views in the selection and adoption of the most useful plan. The Reply of Mr Peers is connected with the Report, and contains much valuable information, and many practical views, gathered partly from a visit for that purpose to different States. The States, whose systems were examined, are, Virginia, Maryland, Pennsylvania, New Jersey, all the New England States, New York, and Ohio. The systems of these States, however, may be resolved into three forms, or those of Connecticut, Massachusetts, and New

York. In these States, there is in one respect a coincidence of plan; that is, there is legislative provision that all youth *shall* be educated, the children of the poor as well as of the rich. The difference is in the collection and distribution of the funds. In these States, legislative aid is generally furnished only in providing teachers; books are furnished by parents, the house is made by tax, imposed at a legal meeting of the district, and fuel is obtained by a direct tax, or subscription.

The means of paying teachers are derived in Connecticut from a fund, in Massachusetts from taxation, and in New York from taxation and a fund united. The school fund in Connecticut is $1,882,261, and the expense of management, $ 3600 a year. The dividends made to the schools last year amounted to 85 cents on each child between the ages of four and sixteen. This large fund was created by the sale of lands in Ohio.

The experience of Connecticut was thought by Mr Peers to be too rich to be passed over without much attention. Accordingly, he goes back to the laws of the Colony of New Haven in 1655, when it was ordered, for 'children's education,' that the 'deputies to the Court in every plantation, the constables and other officers in public trust, should have a vigilant eye over their brethren and neighbors, that all children as they grow capable may, through God's blessing, obtain at least so much as to be able to read the scriptures and other good and profitable printed books in the English tongue.' Parents who neglected 'improving the schoolmaster,' or 'other helps and means that the plantation afforded,' were to be fined, on the first complaint, ten shillings; on the second, twenty shillings; on the third, still higher, or to lose the guardianship of their children and apprentices. The Colony of Connecticut had similar provisions, and also establishments of grammar schools in each county town, where youth could be fitted for college. It appears, however, that these laws were not strictly executed; for thirteen years later, a law, reciting in the preamble that there were still 'persons unable to read the English tongue, and thereby incapable to read the holy Word of God, or the good laws of this Colony,' afterwards directs the grand jurymen in each town to visit such families as were suspected of neglecting to comply with the law, and imposes a fine for each child, whose teaching was neglected.

In the year 1700, a law was made which placed the schools of Connecticut on the foundation that continued till the establishment of the present fund in 1795. A clause of the law of

1700, of very efficient operation, provides that a tax of forty shillings on every one thousand pounds should be collected for instruction. The benefit of this tax was *limited* to those towns which supported schools the time prescribed by law. This, Mr Peers thinks, was the very measure to secure the universal establishment of common schools. The tax for schools was collected with the county taxes, and therefore did not look like a fine for delinquencies, while it had all the operation of one. It was left to the towns, whether they would make the necessary additions to the public money and apply it to schools, or leave it to the common uses of the county. The consequence was, that schools were everywhere maintained, and a 'native, unable to read the English language, was not to be found in the Colony.'

It is perhaps unsafe to remodel a system that has been found to answer all purposes during the changes of a century. In Connecticut the fund is sufficient to give splendid results, but its operation seems to have been injurious, and nothing has been added to the time of schools, or the qualifications of teachers. The only advantage of the fund seems to be the diminution of taxes; though what has been gained to avarice, has been lost to education.

The system in New York is on a better plan — for towns are empowered to tax themselves, and are incited thereto by an adequate incentive, that is, the law tenders each corporation a conditional advantage, which, if it disregard the condition, is forfeited. The increase of school districts in New York has been in thirteen years, 5854, and in the number of scholars instructed, 328,099. Some other results of the New York system will be found under another head.

In Massachusetts the school statistics are not plain, for few towns have made the returns required by law. It is probable that much of the success of the New York system is attributable to the accuracy of these returns. In Massachusetts, *taxation* is the sole reliance of common schools; but Mr Peers well remarks, that what may be safe for her, might be hazardous for other States, where the people have not *inherited* the system of taxation, and where public sentiment attaches less value to education. There is however in our statutes, a heavy penalty for neglect.

Massachusetts may, says Mr Peers, *sustain* her system by public sentiment, but our question is, how Kentucky shall *create* one. He decides, of course, in favor of the New York model.

Mr Peers has so thoroughly investigated the subject, that his opinions are entitled to respect. He remarks, that having been so long accustomed to admire those systems, 'by which more than one fourth of the entire population of a state have been assembled at one time to receive instruction, which have placed a school house within a mile and a half of every child in the community, and have put the children of the rich and the poor upon the same intellectual level,' it is an ungracious task to point out imperfections. The first aim in many states seems to have been the multiplication of schools, which has too often been the multiplication of bad ones. There has been more attention paid to quantity than to quality, and the consequence has been, that as wages have become low, instruction has depreciated. The average pay of instructers throughout New England is, at most, twelve dollars a month, which is less, says Mr Peers, than the remuneration of stage-coachmen, or boot-blacks.

Though in the schoolmaster's duty there is such a lack of profit, there is no particular excitement of honor — schoolmaster, and pedagogue, if this system continue, may be almost terms of reproach. At present almost every instructer of a common school, is such only for a temporary resource or present purpose; and all his future plans are to quit the school as soon as he can get better employment — worse could hardly fall in his way. To make a man advance in capacities for usefulness in any employment, there should be the incentives of ambition and hope; neither of which operate much upon young men who take one school for this winter, another for the next, and then attach themselves to some other pursuit. These evils will endure with the reluctance of the districts to make adequate compensations to teachers of good talents and experience, 'for it is in vain to think of procuring the choicest fruits without paying the market price.' A consequence of this state of things is a great increase of private schools, which have the evil tendency of separating the children of the rich and the poor.

At the head of the schools in Boston, public and private, are gentlemen of high talents and acquirements, whose salaries render it worth their while to make instruction their profession. The result is, that the schools of Boston are models for the Union.

One of the remarks made by Mr Peers, is, that the experience of the States examined, indicates clearly that popular edu-

cation should be taken under legislative patronage and control, as parental affection, patriotism, or even interest, are not enough to secure the instruction of children: Another inference is suggested by the experience of New York, Connecticut, and some other States, that it is not expedient to create an immense fund; and also that the *people* must feel an interest in schools before legislative aid can secure all its advantages to education. As there is not a state in the Union that has ever granted anything for the improvement of instructers, Mr Peers hopes that the honor, as well as profit of making the first grant, will belong to Kentucky.

The Legislature of that state appropriated early, six thousand acres of land to every county, for the purpose of establishing seminaries of learning; but there has been no general plan, and there are now too many costly buildings, unoccupied and useless, that were erected as academies. These county academies will hereafter afford much aid to common schools, and Mr Peers recommends to them articles of philosophical apparatus for familiar illustration, and adds, that 'apparatus well adapted to this purpose, and which cannot be too highly commended for its practical utilility and cheapness, is prepared under the direction of Mr J. Holbrook, of Boston, and introduced into the various Lyceums of the Eastern States.'

Art. X. — Middlesex County Lyceum.

A semi-annual meeting of the Middlesex County Lyceum was held at Concord, on the 18th of May. The President and Vice President being necessarily absent, Col. Samuel Chandler, of Lexington, was chosen President protempore.

After some preliminary discussion, the Lyceum, at eleven o'clock, attended an interesting lecture on practical education, given by Mr Josiah Holbrook, accompanied with an exhibition and explanation of several articles of apparatus prepared for common schools, and for infant schools. The lecture was attended by the citizens and teachers, and the children of the village hastily collected from the schools without previous notice; and the impression made upon their minds by this simple, but effectual method of instruction, as appeared from the readiness

with which they answered questions put to them relating to the subjects of the lecture, was very favorable to its general adoption in all our schools.

Rev. James Walker, of Charlestown, the Chairman of the Curators, then made the following Report, which was unanimously accepted.

'The Curators of the Middlesex County Lyceum, ask leave to submit the following as their semi-annual Report:—

'The first meeting of this Lyceum, held in Concord in November last, was regarded merely as an initiatory step, designed chiefly to give an impulse to the county on the great subject of popular education, as promoted and conducted by these and similar institutions. Accordingly, no plans were matured or proposed for the future conduct of the association, nor any definite instructions given to its officers; and of course the curators, as the general agents for carrying its votes into execution, have had nothing to do. The meeting, however, did not fail of its object, as it excited in many who were present a stronger interest in Lyceums, and led to the establishment of them in several towns, where, as we understand, they have been supported with much spirit and advantage. The curators regret that the information which they have been able to collect on this subject, is not sufficiently exact and full to justify their introducing it into this Report; but they hope that measures will be taken to prevent this difficulty in future. The Constitution provides that the curators should confer on the best means of aiding the various objects of town lyceums, and introducing a general system of friendly cooperation. It has been found, however, that the extreme difficulty of frequent meetings to gentlemen living in remote parts of the county is likely to prostrate, at least in a great degree, this design; and, besides, it is doubted whether most towns would look with favor on such interference. So far as cooperation or an interchange of lectures is desirable, it is better, perhaps, that it should be left to be determined by circumstances and the exigency, and as the particular lyceums who need the measure, may judge expedient. The curators think that the principal advantage to be gained by this association, may be effected by an annual or semi-annual meeting, held successively in the different towns in the county, as the society shall from time to time agree. At this meeting, besides the transaction of the regular business, a public address should be delivered, prepared for the occasion, and adapted to

keep alive an interest in Lyceums, and to explain their natures and uses, and also to suggest improvement in the common school system, and any other means for the diffusion of useful knowledge.

'Respectfully submitted, per order,

'JAMES WALKER, *Chairman.*'

Voted, That all town Lyceums in this county be requested to make reports to the Corresponding Secretary of the county Lyceum on their present state and prospects, on or before the 15th of October annually; and that this vote be communicated to them by the Corresponding Secretary.

Voted, That a committee of three be appointed to take into consideration the Constitution of this Lyceum, and report at the next meeting such alterations as they may think it expedient to have made; and Rev. James Walker, Lemuel Shattuck, and Dr Josiah Bartlett were chosen said committee.

Voted, That the Curators be instructed to provide for a public lecture for the next meeting of the Lyceum; and that they appoint the place where the next meeting shall be held.

Voted, That committees be appointed to consider and report on the following subjects: to wit—

1. Whether any, and if any, what measures can be taken to provide for our common schools, teachers of greater talents and more practical knowledge of their profession, than are now generally employed.

2. Whether the method in which our schools are generally conducted, may not be improved by introducing a modification of the system adopted in schools of mutual instruction, and in infant schools.

3. What apparatus is it desirable should be introduced into our schools; and what series of books can be confidently recommended, that would facilitate their improvement.

4. What are the best plans to be recommended to all towns for the establishment and maintenance of town Lyceums.

Lemuel Shattuck, Rev. Elijah Demond, and Deacon Cyrus Hosmer, were appointed a committee to consider the three first propositions; and William Jackson, Esq. Jonas Wilder, Esq. and Mr Seth Davis, the fourth.

Voted, That these committees be instructed to report at the next meeting.

Voted, That the proceedings of this meeting be published in the Journal of Education.

The Lyceum then adjourned.

Attest. LEMUEL SHATTUCK, *Recording Secretary.*

Art. XI. — Geology.

Nine Simple minerals are called the Geological Alphabet. They have received that name, because they compose either separately or combined, all the rocky masses upon our globe. These minerals are quartz, felspar, mica, hornblende, lime, argillite, gypsum, talc, chlorite. Much the greatest part of mountains and rocks upon the earth, is composed of the three first. Two are the essential ingredients of soils. Granite and gneiss, the two rocks which were first formed, from the great chaotic ocean of which the earth consisted, when it 'was without form and void,' are each formed of quartz, felspar and mica. Granite is the oldest of the two, the coarsest and most chrystaline in its structure, and when occurring with other rocks is placed beneath them. The three ingredients in specimens of granite of the earliest formation, are often coarse, the mica being in large plates, sometimes two feet in diameter, and the felspar and quartz in masses of several tons weight. In the oldest specimens of granite, the felspar is the most abundant of the three ingredients, but as the formation went on it continually diminished, and is consequently less abundant in gneiss, and wholly disappears in mica slate the third rock in age.

The two oldest rocks then, are composed of the same ingredients, and differ only in their structure and proportion of the parts which compose them: the granite being the coarsest, most irregular in its structure and containing the largest proportion of felspar. In gneiss all the scales of mica are placed nearly in the same direction, which of course gives the rock a slaty structure, and hence may properly be called slaty granite.

Mica slate is finer in its texture than either of the other two, and is composed entirely of mica and quartz, the felspar having all been used in the formation of granite and gneiss.

These three rocks are more common than any other found upon the earth, and compose the greatest part of the Andes, the Rocky Mountains, the Hemmelah, the Alps, and most of the highest mountains upon our globe. They are the only rocks to be seen in every part of New England.

Felspar and quartz are not only the most abundant ingredients, both in rocks and soils, but they are essential in two of the useful arts; the one being always used in the manufactory of porcelain, the other in that of glass. Porcelain clay, which is

much used by the Chinese under the name of kaolin, in the manufactory of their ware, is decomposed felspar. Sometimes felspar is pulverised from solid masses for the manufactory of porcelain, when it usually requires some quartz, or silex to be added. It is by a mixture of felspar and quartz, or of clay and silex, that this useful and beautiful material holds a middle place between earthern ware and glass; for it contains the ingredients of both. It is neither opaque like earthern, nor transparent like glass, but is translucent, or semi-transparent.

Though hornblende is a much less common ingredient in rocks than felspar or quartz, in some ledges, and even in mountains of great extent, it forms the principal part. Much the greatest part of greenstone, which is probably more abundant than any other rock within twenty miles of Boston, and composes the two ranges of mountains which commence at New Haven, Connecticut, under the names of East and West Rocks. Hornblende is also the principal ingredient of basalt, the rock which composes the Giant's Causeway in the Northeast part of Ireland, and which bears a very near resemblance to some specimens of greenstone.

Sienite also contains hornblende, though in smaller quantities than the rocks last mentioned. This is extensively used as a building material, and is at present brought into Boston for that purpose in greater abundance than any other rock, and is commonly known by the name of Quincy granite.

Art. XII.—Convention of Teachers at Worcester, 13th April.

It was agreed to form a County Association for the improvement of popular education, to be principally effected by affording facilities for the better education of teachers. We have only room for the officers of the Association.

President — Rev. Jonathan Going. *Vice President* — Rev. Joseph Allen. *Rec. Secretary* — Mr Anthony Chase. *Cor. Secretary* — Emory Washburn, Esq. *Directors* — Gen. Salem Towne, Rev. Alonzo Hill, Heman Stebbens, Esq. Rev. John Nelson, Ira Barton, Esq. Caleb Hayward, Esq. Joseph Willard, Esq.

Art. XIII.—Circular, of the Central Committee of Massachusetts, on Lyceums.

Sir,— This communication is respectfully addressed to you by the Central Committee of Massachusetts, on Lyceums and Popular Education. The proceedings which led to the appointment of this Committee, will, in the first place, be briefly noticed, and then the object of this Circular will be presented.

In February, 1829, a public meeting was held in the Representatives' Hall, in Boston, consisting of members of the Legislature and other gentlemen, to consult upon the state of education in this Commonwealth, and on those associations for promoting it, which have been denominated Lyceums. Of this meeting the Hon. Mr Dennie, of Leicester, was chairman, and Z. Eddy, Esq. of Middleborough, secretary. Several gentlemen addressed the meeting, and resolutions were adopted, which were afterwards published. A committee was also appointed, to collect information concerning Lyceums in this Commonwealth, and report at a similar meeting, to be held during the ensuing session of the Legislature.

At this meeting, which was held on the evening of February 19th, 1830, and which was very fully attended by gentlemen from different parts of the State, his Excellency Governor Lincoln presided, and J. S. C. Knowlton, Esq. of Lowell, and T. A. Green, Esq. of New Bedford, were secretaries. The Rev. Asa Rand, in behalf of the State Committee, presented a long and interesting report, on the origin, progress and character of Lyceums. The meeting was addressed by several gentlemen, and the following resolutions were passed:—

Resolved, That we regard the formation and success of Lyceums throughout this Commonwealth, as calculated to exert an auspicious influence upon the interests of popular education, and of literature and science generally.

Resolved, That it be recommended to the school teachers in the several towns, to connect themselves with Lyceums, and form a distinct class or division for their appropriate pursuits.

Resolved, That for the purpose of collecting and diffusing information on the subject of Lyceums, a committee be appointed by this meeting, consisting of not less than three persons from each county, to report at a similar meeting during the next winter session of the legislature — and that the same committee be requested to promote the formation of County Lyce-

ums, and to encourage a representation from them to consult on the establishment of a State Lyceum, at some convenient time in the next winter.

The following gentlemen were then elected as members of the committee, contemplated in the last resolution : —

For Suffolk County.—Rev. Asa Rand, James C. Merrill, Alex. H. Everett, James Bowdoin, John C. Gray, William P. Mason, Benjamin T. Pickman, John P. Bigelow, Ebenezer Bailey.

Essex.—Stephen C. Phillips, Rufus Choate, Benjamin Greenleaf, Rev. Dr Dana, William Thorndike, Gayton P. Osgood, Alonzo Lewis, Samuel Pickard.

Middlesex.—Rev. James Walker, William Jackson, Rev. Charles Train, Lemuel Shattuck, Luther Lawrence, J. S. C. Knowlton, Prof. John H. Ashmun, Warren Colburn.

Norfolk.—Thomas French, Josiah J. Fiske, Horace Mann, Minot Thayer, Warren Lovering.

Bristol.—Thomas A. Green, Rev. Orville Dewey, Jacob Chapin, James Ford, James C. Starkweather.

Plymouth.—Dr Winslow Warren, John B. Thomas, Zachariah Eddy, Rev. Samuel Dean, Solomon Lincoln, Jr.

Worcester.—Rev. John Wilder, Jr, Rev. Jonathan Going, Ira Barton, Charles Russell, Wm. Lincoln, Joseph Willard, Emory Washburn, Rev. Calvin Lincoln, Jr.

Hampden.—Wm. B. Calhoun, Rev. Simeon Colton, Rev. Wilbur Fisk, James Fowler.

Hampshire.—Charles A. Dewey, Professor Samuel M. Worcester, Elisha Edwards, Joel Haynes.

Franklin.—Rev. Titus Strong, Samuel C. Allen, Dr Stephen W. Williams, Dr John Brooks.

Berkshire.—Theodore Sedgwick, Samuel M. McKay, Henry Shaw, Wm. Williams, Charles Sedgwick, Parker L. Hall.

Barnstable.—Nymphas Marston, Rev. Henry Hersey, John B. Doane, Dr Levi Chamberlain.

Dukes County.—Theodore G. Mayhew, Charles G. Athearn, Thomas Cook.

Nantucket.—Walter Folger, James Mitchell, Dr Paul Swift.

As many of these gentlemen as could be collected, met in Boston on the evening of March 23d, and made arrangements for fulfilling the purpose of their appointment.

A *Central Committee* was chosen, consisting of Messrs. Everett, Rand, Bowdoin, Merrill, Bigelow, Bailey, Walker, Ashmun, Mann, and Lovering, for the purpose of corresponding with the committees in the several counties.

Mr Ebenr. Bailey, of Boston, was elected Corresponding Secretary of the committee.

At this meeting of the State Committee, the following resolutions were passed, on the motion, severally, of Messrs. Greene, Bailey, and Sedgwick: viz.

Resolved, That it be recommended to the town Lyceums, respectively, to cooperate with the authorities in their several towns, and to lend their aid in the proposed surveys for a map of the Commonwealth; and that they avail themselves of the opportunity, to make a scientific and practical examination of the resources of their own towns, and of the neighboring towns in which no Lyceums are yet formed; and that the members of this Committee will endeavor to give their personal attention and assistance for this purpose.

Resolved, That the County Committees be requested to communicate to the Central Committee, from time to time, such information as they may possess, as to the forming of new Lyceums in their respective counties, together with any other information on the subject, which they may regard as interesting and useful.

Resolved, That it shall be the duty of the Central Committee as soon as may be, to prepare and transmit a circular, for the purpose of communicating such information to the County Committees as shall be, in their opinion, most conducive to the success of the formation of County Lyceums.

In performing the duty enjoined by this resolution, sir, the Central Committee desire you to accept this notice of your appointment as above, and to render your aid on this important subject. It was the intention of the public meeting, that the gentlemen chosen in each county should become organized as a County Committee, to employ such measures as may seem to be suitable for promoting Lyceums in their own bounds, and also to correspond with the Central Committee. The gentleman first named in each county, was requested to act as Chairman, to convene his associates as soon as may be; and it was understood they would add to their number if they should see fit.

To aid those members of the Committee to whom this subject may not be familiar, the following statement is made.

A Lyceum is a voluntary association of persons for mutual improvement. The *subjects* of their inquiries may be, the sciences, the useful arts, political economy, domestic economy, or such other matters as are best adapted to the wants, or inclination, or employments of the members, and may vary

according to times and circumstances. The more frequent topics, thus far, have been, the exact sciences, in their application to the arts and purposes of life; with others of a practical nature, and such as are profitable to persons of different classes and ages.

The *regulations* of these associations are few and simple, and resemble those which are adopted in small benevolent societies. The officers are, usually, a President, Vice President, Treasurer, Recording Secretary, Corresponding Secretary, and — Managers, who, together, constitute a Board of Directors.

The *exercises* of the Lyceum, are, familiar lectures from men of education in the town, or from other members who investigate particular subjects for the occasion; also, discussions and debates. In some small Lyceums, or in the classes into which the larger are divided for occasional purposes, the exercises are free conversation, written themes, recitations, or mutual study. The lectures are sometimes procured at the expense of the Lyceums; more frequently they are given by the members, and in this case, are always gratuitous.

The *persons* who associate are of any age, and from any class in society, sustaining a good character; all who are in pursuit of knowledge, more particularly the young and middle aged. The system is specially adapted to teachers of every grade; the more advanced pupils in the various schools, and enterprising young men already engaged in business, who have done with schools, but who thirst for more knowledge. Ladies are invited to be present at the lectures and discussions, not as active members, but to participate in the benefits.

The *meetings* are in the evenings, usually at intervals of one or two weeks; but are, in most places, suspended during the busiest part of the summer season.

It is highly important to the efficiency of a village Lyceum, that its inquiries be aided by apparatus. The more simple and cheap kinds are procured. Early foundations have also been laid, for interesting collections of minerals and other cabinets of science. Many Lyceums have valuable libraries for the use of their members. In some instances, these have been formed anew, and, in others, a union has been effected with social libraries, already existing — an arrangement which, it is believed, will be found profitable to both parties.

Associations, under the name of Lyceums, were first formed in the south part of the county of Worcester in the autumn

of 1826; though some existed before on a similar principle, under other names. They have been gradually extending in this State to the present time. The number of town Lyceums reported at the public meeting, was 78; in Suffolk county, 1; Essex, 14; Middlesex, 16; Norfolk, 6; Plymouth, 4; Barnstable, 3; Nantucket, 1; Bristol, 2; Worcester, 23; Hampshire, 2; Hampden, 3; Franklin, 1; Berkshire, 2. The information received, was incomplete, particularly in regard to the four western counties. There are *County* Lyceums in Worcester, Middlesex, and Essex counties. A county Lyceum is composed of delegates from such town Lyceums as choose to unite; the union is formed for some purposes of common interest, and meetings are held once or twice a year. It is but an association of Lyceums, as a town Lyceum is of individual persons.

A Lyceum is easily formed in almost any country village or neighborhood. It requires two or three active, enterprising, matter-of-fact men, to collect their friends together, take hold of any topic of common interest, adopt a few regulations, and *go to work*. There is nothing mysterious, nothing difficult, in the process, if the members have only a desire for knowledge and improvement, and each resolves to do his own part in suggesting topics, promoting investigation, and solving inquiries. The social principle is brought into active operation; and where energy and promptness are the order of the day, a Lyceum becomes a most profitable school of mutual instruction.

The advantages of this kind of association, where the experiment has been faithfully tried, are great and obvious; but they cannot here be named. The committee, however, can venture the assurance with perfect confidence, that the American Lyceum promises a very extensive diffusion of practical and useful knowledge. Their beneficial influence is soon manifest, in the improved character of schools and teachers, in the mental habits of all classes engaged in them, and in the elevation of the moral and social character. It would afford the committee peculiar gratification, to be able to announce, at the close of the year, that every town in the Commonwealth has its Lyceum in full operation, and every populous neighborhood, its branch or class in connexion with the Lyceum of the town.

The Central Committee refer the resolutions above quoted, to the attention of their associates in the several counties,

without any detailed comment. Gentlemen will perceive that they are requested to promote the formation of county Lyceums, *provided* town Lyceums previously exist, and are willing to appoint delegates for that purpose. Their *first* object, therefore, will be, if they assent to this principle, to promote these establishments in the *towns;* and *then*, one for the *county*. The formation of associations of *teachers* as *branches* of Lyceums, is also commended to their special attention; also, the introduction of the Infant School system into common schools, wherever teachers can be *thoroughly* prepared, together with surveys of the towns, and the construction of maps. Many other measures will occur to the County Committees without our suggestion, when once they form *themselves* into a temporary Lyceum, and inquire what they may do to promote this cause.

Another service requested of the County Committees is, that they will report to the Corresponding Secretary everything of importance relating to Lyceums, in their respective counties; both what is already done, and what may be accomplished through their own instrumentality. These returns should embrace an account of each Lyceum, its name, the date of its formation, the number of its members, the principal topics of inquiry, the classes, the libraries and apparatus, the association of teachers and their proceedings, the degree of interest felt on the subject, the apparent practical influence on the members and society around them, and any improvements which may have been made in the plan or management of these bodies, which are not generally known.

By order of the Central Committee.

A. H. EVERETT, *Chairman.*

E. BAILEY, *Corresponding Secretary.*